

Comparisons of Job Characteristics

Focus Occupation: [Cartographers and Photogrammetrists \(17-1021\)](#)

Associated Occupation: [Geoscientists, Except Hydrologists and Geographers \(19-2042\)](#)

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge

Similarity of Focus Occupation to Associated Occupation: 71

Focus Occupation: Cartographers and Photogrammetrists (17-1021)

Associated Occupation: Geoscientists, Except Hydrologists and Geographers (19-2042)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation
Engineering and Technology	5.7	17.8	5.4	<< Extensive education and/or training may be required
Geography	3.9	17.4	19.1	0 Current knowledge level may be sufficient
Mathematics	9.2	16.0	9.9	<< Extensive education and/or training may be required
Computers and Electronics	8.4	15.0	14.8	0 Current knowledge level may be sufficient
Physics	4.3	14.4	2.3	<< Extensive education and/or training may be required
Chemistry	4.8	10.3	1.4	<< Extensive education and/or training may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 76

Focus Occupation: Cartographers and Photogrammetrists (17-1021)

Associated Occupation: Geoscientists, Except Hydrologists and Geographers (19-2042)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation
Reading Comprehension	10.7	16.0	12.8	<< Extensive development of skills in this area may be required
Science	4.5	15.1	3.6	<< Extensive development of skills in this area may be required
Active Listening	11.0	13.6	11.1	< A higher skill level may be required
Complex Problem Solving	9.1	11.9	9.8	< A higher skill level may be required
Mathematics	6.2	9.4	7.9	< A higher skill level may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities		Similarity of Focus Occupation to Associated Occupation: 94			
Focus Occupation: Cartographers and Photogrammetrists (17-1021) Associated Occupation: Geoscientists, Except Hydrologists and Geographers (19-2042)					
Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Written Comprehension	11.0	16.0	12.3	<<	Extensive improvement in abilities may be required
Written Expression	9.8	14.2	12.0	<	Some improvement in abilities may be required
Inductive Reasoning	10.2	13.2	11.4	<	Some improvement in abilities may be required
Deductive Reasoning	10.6	13.0	11.0	<	Some improvement in abilities may be required
Near Vision	11.1	12.8	12.8	0	Current ability level may be sufficient
Category Flexibility	9.0	12.3	9.9	<	Some improvement in abilities may be required
Mathematical Reasoning	6.3	10.3	8.1	<	Some improvement in abilities may be required
Flexibility of Closure	7.8	10.1	10.1	0	Current ability level may be sufficient
Number Facility	6.3	9.1	7.9	<	Some improvement in abilities may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common		Similarity of Focus Occupation to Associated Occupation: 94
Focus Occupation: Cartographers and Photogrammetrists (17-1021) Associated Occupation: Geoscientists, Except Hydrologists and Geographers (19-2042)		
Work Activities	Exclusivity of Activity	
Analyze technical data, designs, or preliminary specifications	47	
Collect geographic or physical data	81	
Develop plans for programs or projects	31	
Draw maps or charts	69	
Draw prototypes, plans, or maps to scale	57	
Interpret aerial photographs	69	
Interpret maps for architecture, construction, or engineering project	77	
Prepare technical reports or related documentation	22	
Read maps	42	
Read technical drawings	7	
Understand engineering data or reports	48	

Use computer aided drafting or design software for design, drafting, modeling, or other engineering tasks	58
Use drafting or mechanical drawing techniques	50
Use geographical information system (GIS) software	72
Use photogrammetric techniques	99
Use spreadsheet software	18

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: 72

Focus Occupation: Cartographers and Photogrammetrists (17-1021)

Associated Occupation: Geoscientists, Except Hydrologists and Geographers (19-2042)

Tools and Technologies	Exclusivity
Audio and visual equipment	4
Business function specific software	1
Cameras	2
Computer data input devices	2
Computer printers	2
Computers	1
Content authoring and editing software	1
Data management and query software	1
Drafting supplies	9
Geography and map skills resources and accessories	51
Industry specific software	1
Information exchange software	1
Land surveying instruments	19
Light and wave generating and measuring equipment	4
Measuring and layout tools	3
Network applications software	1
Radar and sonar systems and components	24
Utility and device driver software	17

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.